Section IV. Construction Standards and Safety Regulations

Chapter 7. Safety and Health In Construction

According to the California Division of Labor Statistics and Research, the construction industry has one of the highest occupational injury rates of any major industry in the state. A substantial portion of these injuries could be prevented if employers complied with occupational safety and health standards.

The following is a description of many of the general safety and health requirements and practices that affect contractors in California. In addition, there are many safety and health requirements that apply to specific construction trades and activities.

It is your responsibility to be informed as to the local, state, and federal laws and regulations which affect your business, as well as which regulatory agencies have or share jurisdiction in your area.

RESPONSIBLE AGENCIES

Regulatory and advisory roles pertaining to construction safety and health in California are performed by several state agencies. The following agencies are those with whom contractors and their employees are most likely to be involved.

California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH)

DOSH works to ensure safe and healthful working conditions for California employees through standards enforcement, consultation service to employers, occupational safety and health research, and provision of information and training. DOSH also issues permits for high hazards activities if the employer demonstrates that the places of employment meet safety compliance requirements and that the work can be conducted safely, as planned; and registers contractors who engage in asbestos-related work.

The California Occupational Safety and Health Program (Cal/OSHA)

DOSH enforces the Cal/OSHA program according to the provisions of the California Labor Code. The Cal/OSHA program is approved, monitored and partially funded by Federal OSHA in accordance with the Federal Occupational Safety and Health Act of 1970. To ensure that working conditions are safe and healthful and that employers meet their obligations to provide such conditions, DOSH/Cal/OSHA enforces the state standards and other occupational safety and health regulations, responds

to complaints, makes routine inspections of workplaces, and investigates serious and fatal job-related injuries and illnesses.

Cal/OSHA Consultation Service

The Cal/OSHA Consultation Service provides free on-site consultation. Its goal is to help employers develop solutions to their occupational safety and health problems so that they can voluntarily comply with safety and health standards. The Consultation Service staff help identify workplace hazards and help develop and improve the company's Injury and Illness Prevention Program (IIPP).

When the Consultation Service staff visit a jobsite and review the contractor's IIPP, they not only identify occupational hazards, but point out areas where the safety orders require specific actions and recommend ways to achieve compliance.

In contrast to DOSH Enforcement, the Consultation Service staff do not issue citations or penalties. Instead, they give the contractor a statement which outlines the conditions found and describes the need for corrective action.

Occupational Safety and Health Standards Board

The Occupational Safety and Health Standards Board adopts, amends or repeals California safety and health standards. (The State standards must be at least as strict as the Federal OSHA standards.) The Standards Board also has the authority to grant petitions to adopt or amend regulations, and to grant variances to employers. Anyone may participate in standards development by participating at the Standards Board's public hearings or as members of advisory committees.

Occupational Safety and Health Appeals Board

The Occupational Safety and Health Appeals Board hears and makes decisions on appeals concerning citations, orders, civil penalties and abatement dates issued by DOSH. Employers, employees, and employee representatives may participate in proceedings of the Appeals Board.

Other Agencies Share Responsibility

The following agencies share additional responsibilities in the area of hazardous substances: Department of Health Services, Toxic Substances Control Division; California Environmental Protection Agency; State Allocation Board, Office of Public School Construction; Waste Management Board; Department of Fish and Game; California Highway Patrol; Department of Forestry; U.S. Environmental Protection Agency; and County Air Emissions Control Boards.

NOTE: The Contractors State License Board may also take action against a contractor who has violated regulations under the jurisdiction of other agencies.

INFORMATION ABOUT CONSTRUCTION SAFETY LEGAL REQUIREMENTS

Every employer and employee must comply with all applicable occupational safety and health standards, rules, regulations, and orders. The bulk of the legal requirements governing employer responsibilities and employee rights can be found in the California Labor Code and Title 8 of the California Code of Regulations. Title 8 regulations that pertain to most construction contractors can be found in the Construction Safety Orders (beginning with Section 1500) and the General Industry Safety Orders (beginning with Section 3200). Title 8 also includes many other Safety Orders which encompass regulations that govern more limited trades and activities, such as the Electrical Safety Orders and Compressed Air Safety Orders. The Safety Orders include requirements for permits, safe work practices, operations and equipment. In some cases, detailed specifications which apply to construction work are included.

Many of the employer responsibilities and employee rights are detailed in the Cal/OSHA poster, *Safety and Health Protection on the Job*. Each construction contractor is required to post at least one copy of this poster and the Code of Safe Practices at each location where employees report to work each day, or, if the employees do not usually work at or report to a single establishment, the notice shall be posted at the location(s) from which the employees operate to carry out their activities (Labor Code 6408(a); 8 CCR 340). The notice must be posted in a conspicuous place where notices to employees are customarily posted.

MULTI-EMPLOYER WORKSITES

Construction and nonconstruction worksites may have multiple employers. When multiple employers are involved, DOSH has developed the following enforcement criteria to categorize employers into four types:

- *Exposing Employer*—the employer whose employees were exposed to the hazard.
- Creating Employer—the employer who actually created the hazard.
- *Controlling Employer*—the employer who was responsible, by contract or who has the authority for ensuring that the hazardous condition is corrected.
- *Correcting Employer*—the employer who had the responsibility for actually correcting the hazard.

NOTE: DOSH may cite the Creating, Controlling or Correcting Employers regardless of whether their own employees were exposed to the hazard.

DOSH may determine whether the available information indicates that the Exposing Employer meets each of the following five criteria for an affirmative defense:

- 1) The employer did not create the hazard;
- 2) The employer did not have the responsibility or the authority to have the hazard corrected;
- 3) The employer did not have the ability to correct or remove the hazard;
- 4) The employer can demonstrate that the Creating, the Controlling or the Correcting employers, as appropriate, were specifically notified or were aware of the hazards to which the employees were exposed; and
- 5) The employer took appropriate feasible steps to protect the employees from the hazard; instructed them to recognize the hazard; and, where necessary, informed them of how to avoid dangers associated with it, including removing the employees from the job if the hazard was extreme and there was no other way to protect them from the hazard.

INJURY AND ILLNESS PREVENTION PROGRAM (IIPP)

Accidents are costly. These costs may include:

- Productive time lost by the injured employee;
- Productive time lost by employees and supervisors attending the accident victim;
- Clean-up and start-up of operations interrupted by the accident;
- Time to hire or to retrain other individuals to replace the injured employee until his or her return;
- Time and costs for repair or replacement of any damaged equipment or materials;
- Costs of continuing all or part of the employee's wages, in addition to compensation;
- Reduced morale among employees, and perhaps lower efficiency;
- Increased workers' compensation insurance rates;
- Costs of completing paperwork generated by the incident; and
- Costs of legal representation in civil and criminal cases.

In California, every employer is required to provide a safe and healthful workplace for his or her employees by doing everything reasonably necessary to protect their lives, safety, and health (Labor Code 6400, 6401, 6401.7, 6402 and 6403). The key to accomplishing this goal of maintaining a safe and healthful workplace is the requirement that every employer have and maintain an effective IIPP. Strict guidelines for such a program were placed into law by Senate Bill 198 in 1989 (Labor Code Section

6401.7). The regulations required by that law, and other related laws, can be found in Sections 1509, 1510, 1511, 1512, 1514 and 3203 of Title 8 of the California Code of Regulations. Professional consultants from the Cal/OSHA Consultation Service are available to provide free assistance to employers and employees on how to set up an effective IIPP. These consultants can also provide safety and health training to your employees at your jobsite.

Required IIPP Elements

Your IIPP must be a WRITTEN PLAN that includes procedures and is PUT INTO PRACTICE and DOCU-MENTED. Some of the requirements are as follows:

- Management commitment to safety and health. This
 commitment should be evident from strong organizational policies, procedures, incentives and disciplinary
 actions necessary to ensure employee compliance with
 safe and healthful work practices. Management
 commitment is also demonstrated by the allocation of
 company resources—financial, material and personnel—for identifying and controlling hazards, purchasing protective equipment and training employees in
 safety and health.
- Identify the person or persons with authority and responsibility for implementing the program.
- Include a system for communicating with employees—in a form readily understandable by all affected employees—on matters relating to occupational safety and health. Employees should be encouraged to report unsafe conditions—with the assurance that management will take action to correct the problem and that the employee need not fear reprisal for reporting the problem.
 - As part of this communication system, every construction contractor must adopt a written Code of Safe Practices. The contents must include language equivalent to the applicable general statements included in Plate A-3 of the appendix to the Construction Safety Orders in Title 8. In addition, each employer should include other safety guidelines that fit the operations more exactly. The Code of Safe Practices must be posted at a conspicuous location at each job site office or be provided to each supervisory employee, who shall have it readily available.
- Include a system for identifying, evaluating and controlling existing or potential workplace hazards.
 - No employee shall be required or knowingly permitted to work in an unsafe place, unless for the purpose of making it safe, and then, only after proper precautions have been taken to protect the employee while doing such work.
 - Prior to starting work, the employer must survey the job site to determine what hazards may be involved and what safeguards will be necessary to ensure that the work is performed safely.

- Periodic, scheduled inspections must be conducted to identify unsafe conditions and work practices.
 The frequency of inspections should be determined by the type and magnitude of the hazards, the proficiency of the employees, how recently any changes in equipment or procedures were introduced, and the history of workplace injuries and illnesses.
- Occupational illnesses and accidents must be investigated. The investigatory procedures must include a written report of each event.
- The employer shall permit only qualified persons to operate equipment and machinery.
- Every employer must provide and require employees to use safety devices. Employers must adopt and require the use of methods and procedures that are reasonably adequate to make the work and workplace safe.
- Every employer must develop, maintain and document training programs for both supervisors and employees. The program should provide information about general safe work practices, plus specific instruction with regard to hazards unique to a job assignment.
 - When employees are first employed they must be given instructions regarding job hazards, safety precautions, and the employer's Code of Safe Practices.
 - Employees given new job assignments must be given training for this work.
 - Supervisors must conduct "toolbox" or "tailgate" safety meetings with their crews at least every ten working days.
 - Where employees may be subject to known or new job site hazards, such as flammable liquids, gases, poisons, caustics, harmful plants and animals, toxic materials, confined spaces, etc., they must be instructed in the recognition of the hazard, in the procedures for protecting themselves from injury, and in the first aid procedure in the event of injury. (NOTE: Specific requirements pertaining to exposure to hazardous substances are discussed below.)
 - Employees need instruction whenever new protective equipment or different work practices are to be used on existing hazards.
- Every employer must ensure the availability of emergency medical services for his or her employees. A suitable number of appropriately trained persons must be available to render first aid. A first aid kit must be present at each workplace.

Keep in mind that safety regulations and codes establish minimum standards. It is up to each contractor to implement a comprehensive safety program that goes above and beyond these safety standards.

EMPLOYEE COMPLAINT RIGHTS AND PROTECTIONS

Employees or their representatives who believe that unsafe or unhealthful conditions exist in their workplace have the right to file a complaint with any DOSH office. DOSH must investigate good faith complaints of serious violations within three working days of receiving the complaint. Complaints of nonserious violations must be investigated within 14 calendar days (Labor Code 6309).

The name of the person making the complaint will be kept confidential by DOSH (Labor Code 6309). Employees may not be fired or otherwise punished for filing a good faith complaint with DOSH or for cooperating in any investigation of unsafe working conditions or work practices (Labor Code 6310). Employees have a right to refuse to perform work which would violate any Labor Code provision or occupational safety or health regulation, where the violation would create a real and apparent hazard to the employee or other employees. No employee may be laid off or discharged for refusing to perform such work (Labor Code 6311).

INJURY AND ILLNESS REPORTING AND RECORDKEEPING REQUIREMENTS

In addition to the documentation of safety inspections and employee training described above, employers must file reports and maintain records of occupational injuries or illnesses. There are specific requirements for the form and content of this information.

Reporting Requirements

- Employers must report immediately by telephone or telegraph to the nearest DOSH district office any work-related fatality or serious injury or illness suffered by an employee. "Immediately" means as soon as practically possible, but not longer than 8 hours after the employer knows of, or, with diligent inquiry would have known of, the incident (8 CCR 342). "Serious injury or illness," in general, means any employment related injury or illness which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation, or in which an employee suffers a loss of any member of the body or suffers any serious degree of permanent disfigurement (8 CCR 340).
- Employers must file a complete report of every occupational injury or illness which results in absence from work for a full day or shift beyond the date of the injury or illness, or which requires medical treatment beyond first aid (Labor Code 5401a; Labor Code 6409.1; 8 CCR 14001).

The report must be made within five days of the incident, using Form 5020, *Employer's Report of Occupational Injury or Illness*, which is published by the Department of Industrial Relations, Division of Labor Statistics and Research. In the event an employer has filed a report of injury or illness, and the

employee subsequently dies as a result of the reported injury or illness, the employer must file an amended report which indicates the death. This amended report must be filed within five days after the employer is notified or learns of the death. Self-insured employers shall report directly to the Division. Employers who are insured by a workers' compensation insurance carrier shall file the report with the carrier.

NOTE: Insured employers are required to file a report with their carriers of EVERY work-related illness or injury (Labor Code 3760).

Recordkeeping Requirements

Records of accidents, work-related injuries, illnesses and property losses serve a valuable purpose. As stated above, occupational illnesses, accidents and near-misses must be investigated. Your standard investigatory procedures must include a written report of each incident. You are also required to maintain records of your scheduled periodic hazard identification inspections and the safety training that your employees and supervisors have received. When you review all of these records together, causes of the injuries and accidents can be identified. You may determine that you need different or additional inspection and/or training practices that will be more likely to prevent similar illnesses or accidents from recurring.

Employers must keep records when injuries or illnesses occur (some exceptions may apply to employers who had no more than ten employees for all shifts combined during any 24-hour period during the previous calendar year). The Cal/OSHA Form 300, *Log of Work-Related Injuries and Illnesses*, is the basic document on which work-related employee injuries and illnesses are recorded. Employees, former employees, and their representatives shall have access to the Form 300 *Log*.

For more details on this regulation see Title 8 CCR Section 14300–14300.48.

PERMITS

Permits must be obtained from the DOSH Enforcement Unit before an employer undertakes the following kinds of work (8 CCR 341):

- Construction of trenches or excavations which are 5 feet or more deep, into which a person is required to descend;
- Construction of any building, structure, falsework, or scaffolding more than three stories high (a story is 12 feet in height—a tower crane erected on a construction project is considered, for the purposes of these requirements, to be a structure);
- Demolition of any building, structure, falsework, or scaffolding more than three stories high; and
- Erection or dismantling of any vertical shoring systems more than three stories high, or the equivalent height (36 feet).

The contractor should contact the local DOSH Enforcement Office to obtain information regarding who must obtain the permit, when the permit must be obtained, the fees charged to obtain the permit, and any additional requirements the employer must comply with before the permit can be granted.

Annual permits may be obtained for the erection and dismantling of scaffolds, falsework, vertical shoring systems, and construction of excavations or trenches (8 CCR 341.1).

DOSH Enforcement Unit may conduct an investigation or require a safety conference prior to issuance of the permit. Employees or their representatives are to be included in any required pre-job safety conference (8 CCR 341.1).

Permits must be posted at or near each place of employment requiring a permit (8 CCR 341.4).

An employer who is denied a permit by DOSH Enforcement Unit may appeal that denial to the Director of the Department of Industrial Relations (8 CCR 341.2).

DOSH Enforcement Unit may at any time, upon a showing of good cause and after notice and an opportunity to be heard, revoke or suspend a permit (8 CCR 341.5). The employer may appeal the revocation or suspension to the Director.

VARIANCES

Permanent Variance

An employer may apply to the Standards Board for a permanent variance from a California occupational safety and health standard, order, or special order, if the employer demonstrates that an equivalent method, device, or process can be used which will provide equal or better safety for employees. Applications are considered at variance hearings conducted by the Standards Board. Rules of procedure are contained in Chapter 3.5 of Title 8 of the California Code of Regulations.

Temporary Variance

The Division of Occupational Safety and Health may grant a temporary variance to employers if the employer files a proper application and one of the following conditions exists (Labor Code 6450–6457):

- The employer cannot comply with a new California standard by its effective date and applies to the Division of Occupational Safety and Health for a temporary variance prior to the effective date of the standard:
- The employer has developed a new process or has new machinery and finds that this is in violation of an existing California standard and needs extra time to bring the new process or equipment into compliance; or
- The employer has just purchased a plant or establishment and finds that there are violations that will take a certain length of time to correct.

A temporary variance of up to one year may be granted only after notice is given to employees and a hearing is held by DOSH. The temporary order may be renewed up to two times, for a maximum of 180 days each time. Anyone adversely affected by the granting or denial of a temporary variance may appeal that action to the Standards Board.

INVESTIGATIONS OF UNSAFE CONDITIONS

Employers may be subject to an inspection (without advance notice) in response to one or more of the DOSH criteria: imminent danger, fatality or serious accident, investigations of serious injuries or illness, employee complaint, public complaint, high hazards list, permits, etc. Also, firms in industries with higher than average potential risk are scheduled for inspections. During the inspection, employees may be interviewed and photographs may be taken (Labor Code 6309). An employee representative must have an opportunity to accompany the DOSH Investigator on worksite inspections (Labor Code 6314(d)).

The employer is protected against the revelation of trade secrets as a result of an inspection or subsequent proceedings (Labor Code 6322 and 6396).

When, in the opinion of the DOSH Enforcement Officer, a place of employment or piece of equipment is in a dangerous condition, is not properly guarded, or is dangerously placed so as to constitute an imminent hazard to employees, DOSH may prohibit entry into the area or use of the equipment (other than, with DOSH approval, to eliminate the dangerous condition). The DOSH Enforcement Officer will attach a conspicuous notice stating the limitations. The notice must remain in place until removed by a DOSH Enforcement Officer after the area or equipment is made safe and the required safeguards or safety devices are provided (Labor Code 6325).

As a result of the investigation, the employer may receive a citation, notice, special order, information memorandum, or an order to take special action for any alleged violation of standards, rules, orders or regulations. Violations will be classified as either serious, other than serious, general, or regulatory, and may be designated as repeat or willful. Citations issued will have penalty assessments associated with them.

Any citation (or copy of a citation) issued for safety and health violations must be posted at or near the place of violation where it is readily observable by affected employees for a period of three days or until the condition is corrected, whichever is longer (Labor Code 6318; 8 CCR 332.4).

The employer may contest any citations, penalties, and abatement (correction) requirements through both formal and informal proceedings (Labor Code 6319).

Penalties will be determined based on the gravity and severity of the violation (Labor Code 6319, 6423-6435).

Penalties may be adjusted, based on:

- The size of the business;
- The good faith of the employer, including timely abatement; and
- The employer's history of previous violations.

Employers who do not have an Injury and Illness Prevention Program shall receive no adjustment for either good faith or a positive history (Labor Code 6428).

The law contains other misdemeanor provisions relating to such matters as revealing trade secrets and unauthorized advance notice of an inspection.

If, after inspection or investigation, DOSH Enforcement Unit issues a citation for a serious violation, it may conduct a reinspection at the end of the period fixed for abatement of the violation (Labor Code 6320).

HAZARDOUS SUBSTANCES

Information and Training

All employers who use hazardous substances and whose employees might be exposed under either normal work conditions or reasonably foreseeable emergency conditions resulting from workplace operations (i.e., equipment failure, rupture of containers, failure of control equipment, etc.), must provide their employees with information and training about these substances, the hazards of these substances, and how to handle these substances under normal and emergency conditions.

Manufacturers of these substances must prepare Material Safety Data Sheets (MSDS), and the manufacturers or sellers of these substances must provide the MSDS to anyone who purchases them.

Employers and employees can find out what hazards are associated with particular substances or chemicals in the workplace, the recommended exposure levels, and the precautions to take in using these substances or chemicals by writing to:

HESIS-TRS (Hazard Evaluation System and Information Service) 1515 Clay Street, Suite 1901 Oakland, CA 94612

In your letter to HESIS (they cannot respond to phone calls), please include the following information:

- your name;
- job title;
- mailing address;
- phone number (include area code);
- the chemical name (not just the product name);
- how the chemical is used:
- how any exposure to the chemical occurred; and
- when the exposure occurred.

California residents may also call the following numbers:

HESIS Telephone Response	
System (English)	(510) 622-4317
Free Publications	(510) 622-4328
Fax	(510) 622-4310

Employers must notify any employee who has been or is being exposed to toxic substances or harmful physical agents in concentrations at levels exceeding those prescribed by applicable standards, orders, or special orders, and inform any employee so exposed of corrective action being taken (Labor Code 6408(e)).

Employees must allow employees to observe monitoring or measuring of exposure to hazards (Labor Code 6408(c)).

Employees must have access to their medical records and to records of employee exposure to potentially toxic materials or harmful physical agents (Labor Code 6408(d); 8 CCR 3204).

Hazardous Substance Removal Work and Remedial Actions

NOTE: The removal of hazardous substances and related remedial actions do not include asbestos-related work, as defined in Section 6501.8 of the Labor Code, or work related to a hazardous substance spill on a highway (Business and Professions Code 7058.7).

As of May 1, 1988, a contractor must have passed an approved hazardous substance removal certification examination before removing hazardous substances or taking related remedial actions (as defined in Chapter 6.8 of Division 20 of the Health and Safety Code) in cases that involve digging into the surface of the earth and removing the material from:

- A site listed pursuant to Section 25356 of the Health and Safety Code;
- A site listed as a hazardous waste site by the State Department of Health Services; or
- A site listed on the National Priorities List compiled pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. Section 9601 et seq.).

The Contractors State License Board may require currently certified licensees to pass additional updated, approved hazardous substance removal certification examinations based on new public or occupational health and safety information. (Business and Professions Code 7058.7; Labor Code 142.7).

Contractors must also comply with the *Hazardous Waste Operations and Emergency Response Standards* (Labor Code 142.7; 8 CCR 5192). These require:

The certification of employees and supervisors involved in hazardous substance removal work;

• The designation of a qualified person who shall be responsible for scheduling any air sampling, laboratory

calibration of sampling equipment, evaluation of soil or other contaminated materials sampling results, and for conducting any equipment testing and evaluating the results of the tests;

Holding a safety and health conference for all hazardous substance removal jobs before the start of actual
work. The conference shall include representatives of
the owner or contracting agency, the contractor, the
employer, employees, and employee representatives. It
shall include a discussion of the employer's safety and
health program and the means which the employer
intends to use in order to provide a safe and healthy
place of employment.

Any contractor who engages in, or any contractor or employer who, either knowingly or negligently, enters into a contract with another person to do hazardous substance work, when that person is required to be, but is not certified pursuant to Business and Professions Code Section 7058.7, is subject to penalty (Business and Professions Code, 7028.1 and 7118.6).

Lead in Construction Work

This section applies to all construction work where an employee may be occupationally exposed to lead. Construction work, in general, is defined as work for construction, alteration and/or repair, including painting and decoration (8 CCR 1532.1). Lead is defined as metallic lead, all inorganic lead compounds, and organic lead soaps.

Employers are responsible for knowing the permissible exposure limit (PEL), assessing the exposure, being aware of the methods of compliance, understanding respiratory protection, being knowledgeable of protective work clothing and equipment, housekeeping procedures and hygiene facilities, practices, and establish regulated areas. The employer must also know the medical surveillance program and medical removal protection practices. The employer is to provide employee information, training, and certification. The employer shall ensure that all employees and supervisors that perform any lead-related construction work are trained by an accredited training provider and they are then certified by the California Department of Health Services. Lastly, the employer is to display appropriate signs and allow employees to observe monitoring procedures.

CARCINOGEN CONTROL

LAW: Employers in California must meet strict standards for the occupational health and safety of employees who handle carcinogenic (cancer-causing) substances on their jobs—for example, asbestos. These standards are part of the Construction Safety Orders and General Industry Safety Orders in Title 8 of the California Code of Regulations. Due to the extent and complexity of the many code requirements, contractors are urged to read the regulations themselves. Regulated carcinogen means a recognized cancer causing substance, compound, mixture, or product regulated by sections 1529, 1532, 1535, 8358, or Article 110 sections 5200-5220.

Registration Required for Carcinogen Use

Businesses involved in the use of carcinogens must inform DOSH. Carcinogen Registration Forms can be obtained from:

DOSH Occupational Carcinogen Control Unit P. O. Box 420603 San Francisco, CA 94142

Requirements for Asbestos-Related Work

Asbestos is the most common carcinogen in construction and demolition work. Persons engaged in insulation, plasterboard, siding and ceiling plaster work risk higher-than-usual exposure to asbestos. Failure to adopt safe work practices for handling asbestos has caused many employees to develop asbestos-related disabling and fatal diseases. The National Cancer Institute estimates that of the four million Americans who have been heavily exposed to asbestos, 1.6 million will die of asbestos-related cancer. It is your responsibility to familiarize yourself with the laws pertaining to asbestos.

The owner of a commercial or industrial building or structure, an employer, or a contractor who engages in, or contracts for, asbestos-related work must make a good faith effort to determine if asbestos is present before the work is begun. The contractor or employer must first inquire of the owner of a building or structure built prior to 1978 if asbestos is present. Failure to do so may result in penalty (Labor Code 6501.9 and 6505.5).

If the Division of Occupational Safety and Health has reasonable cause to believe that any workplace contains asbestos, and if there appears to be inadequate protection for employees at that workplace from the hazards from airborne asbestos fibers, the division may issue an order prohibiting use (Labor Code 6325.5).

"Asbestos-related work" means any activity which by disturbing asbestos-containing construction materials may release asbestos fibers into the air and which is not related to its manufacture, the mining or excavation of asbestos-bearing ore or materials, or the installation or repair of automotive materials containing asbestos (Labor Code 6501.8).

"Asbestos-containing construction material" means any manufactured construction material which contains more than one tenth of one percent (0.1%) asbestos by weight (8 CCR 341.6).

Asbestos Removal Certification

A contractor may not engage in asbestos-related work which involves 100 square feet or more of surface area of asbestos-containing materials unless the qualifier for the license has passed an asbestos certification examination that is developed and administered by the Contractors State License Board (CSLB). Exceptions include contractors involved with the installation, maintenance, and repair of asbestos cement pipe or sheets, vinyl asbestos floor materials, or asbestos bituminous or resinous materials (Business and Professions Code 7058.5 and 7065.01).

Any contractor who engages in, or any contractor or employer who, either knowingly or negligently, enters into a contract with another person to do asbestos-related work, when that person is required to be, but is not certified pursuant to Business and Professions Code Section 7058.5, is subject to penalty (Business and Professions Code, 7028.1 and 7118.5). A contractor who *is not* certified for asbestos-related work may bid on a project involving this work if the asbestos-related work is performed by a contractor who *is* properly certified by the CSLB and registered by DOSH (see below) (Health and Safety Code 25914.3).

Asbestos Removal Registration

All contractors who engage in asbestos-related work which involves 100 square feet or more of surface area of asbestos-containing material which will be handled during the course of work being performed at a single worksite, must register with the Division of Occupational Safety and Health. A "single worksite" includes all buildings, structures, premises, fixtures, machinery or other areas where asbestos-containing construction material will be handled during the course of the work for which the employer has contracted whether pursuant to single or multiple contracts with the same hirer (Labor Code 6501.5; 8 CCR 341.6).

THERE ARE NO EXEMPTIONS FROM REGISTRATION. Those contractors who are exempt from CSLB certification (see above) must still register with DOSH if they are performing asbestos-related work. In addition, the State of California, a city, city and county, county, district, or public utility subject to the jurisdiction of the Public Utilities Commission, shall be required to apply for a registration through the designated chief executive officer of that body. No registration fees shall be required, however, of any public agencies (Labor Code 6508.5).

Applications, applications for renewal, and information can be obtained from:

DOSH Asbestos Contractors Registration Unit (ACRU) 455 Golden Gate Avenue, 10th floor San Francisco, CA 94102 (415) 703-5100

Notification and Posting of Asbestos-Related Work

When an employer will be conducting separate jobs or phases of work which require asbestos removal registration, or where the work process may differ or is performed at noncontiguous locations, written notice must be provided to the nearest DOSH office prior to commencement of any work (Labor Code 6501.5; 8 CCR 341.7). Furthermore, the employer must post a sign readable at 20 feet at the location where any asbestos-related work is to be conducted that states "Danger–Asbestos. Cancer and Lung Hazard. Keep Out."

Asbestos-Related Work in Schools

When asbestos-related work is done in elementary or secondary schools, either public or private, additional standards must be met (40 CFR 763, a provision required under the Asbestos Hazard Emergency Response Act).

Local education agencies are required to use only accredited persons to perform the following tasks:

- Inspecting for asbestos-containing materials in school buildings;
- Preparing management plans concerning the presence of asbestos-containing materials in schools;
- Designing and drafting specifications for asbestos abatement projects; and
- Supervising and conducting the abatement work.

Persons seeking to be accredited must complete a training course that has been approved by the DOSH and pass an examination for that course. There are separate course requirements for inspectors, management planners, project designers, asbestos abatement contractors and supervisors, and for asbestos abatement workers.

Accredited personnel need not be used to conduct small-scale, short-duration maintenance activities.

NOTE: For schools to receive funding for asbestos abatement programs, they must comply with the rules and regulations of the State Allocation Board, Office of Public School Construction (OPSC). Since prompt payment to the contractor may be closely related to the school's receipt of OPSC funding, it is important that the contractor be aware of and encourage compliance with the OPSC requirements.

Renovation and Demolition Work

Renovation and demolition jobs are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), which are enforced by the federal Environmental Protection Agency and local air quality and air pollution districts. Before a renovation or demolition job begins on a site that may include asbestos-containing materials, one of these agencies must be notified. There are strict penalties for violations of the NESHAP requirements.

Disposal of Asbestos

The California Department of Toxic Substances Control, Hazardous Waste Management Branch, enforces the requirements governing the disposal of waste containing asbestos. These requirements include the following (Health and Safety Code, 25143.7):

- If a landfill is used, it must meet waste disposal requirements issued by the regional water quality control board which allow the disposal of such waste;
- The wastes must be handled and disposed of in accordance with the Toxic Substances Control Act (P.L. 94-469) and all other applicable laws and regulations.

CONFINED SPACES

Safety and health practices for confined spaces are outlined in Title 8 of the California Code of Regulations sections 5156, 5157, and 5158 (Labor Code 142.3). A permit-required confined space (8 CCR 5157) is defined as a space large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy. In other confined space operations (8 CCR 5158) confined space is defined by the concurrent existence of conditions where the existing ventilation is insufficient to remove dangerous air contamination, or where an oxygen deficiency

may exist or develop, or where ready access or egress for the removal of a suddenly disabled employee is difficult due to the location or size of the openings.

EXCAVATIONS AND TRENCHES

For regulations relating to permits for excavations and trenches, refer to the California Code of Regulations Title 8, Chapter 3.2, Article 2, Section 341 of the California Occupational Safety and Health Regulations (Cal/OSHA). For definitions, general requirements, and information pertaining to excavations and trenching safety orders, see Title 8 of the California Code of Regulations, sections 1504, 1539–1547 and Labor Code 142.3.

HOW TO OBTAIN ADDITIONAL INFORMATION

WHAT YOU NEED	WHERE TO GET IT	
Browse and order free DOSH publications	Contact: www.dir.ca.gov/dosh	
California Occupational Safety and Health Standards— Title 8 California Code of Regulations, Industrial Rela- tions. The entire Title 8 and the Safety Orders for each industry are available for purchase	Contact: Barclays Law Publishers P.O. Box 3066 San Francisco, CA 94083 (415) 244-6611 or: www.dir.ca.gov	
Information concerning Califonia Occupational Safety and Health requirements	Contact: Cal/OSHA Consultation Services Offices (see list on the next page)	
Free on-site consultation to discuss particular problems and obtain assistance and advice		
DOSH workplace posters		
Recordkeeping and Reporting Requirements	Contact: Division of Labor Statistics and Research P.O. Box 420603 San Francisco, CA 94142	
Log and Summary of Occupational Injuries and Illnesses (OSHA form 300)		
California Work Injuries and Illnesses—Annual Report		
Work Injuries and Illnesses—Quarterly Report		

Cal/OSHA Enforcement Un	it District Offices	
Anaheim	. 2100 East Katella Avenue, Suite 140, Anaheim, CA 92806 (714) 939-0145, Fax	x (714) 939-0815
Concord	. 1465 Enea Circle, Bldg. E, Suite 900, Concord, CA 94520 (925) 602-6517, Fax	x (925) 676-0227
Foster City	. 1065 East Hillsdale Blvd., Suite 110, Foster City, CA 94404 (650) 573-3812, Fax	x (650) 573-3817
Fresno	. 2550 Mariposa Street, Suite 4000, Fresno, CA 93721 (559) 445-5302, Fax	x (559) 445-5786
Los Angeles	. 320 West 4th Street, Suite 850, Los Angeles, CA 90013	x (213) 576-7461
Oakland	. 1515 Clay Street, Suite 1301, Oakland, CA 94612 (510) 622-2916, Fax	x (510) 622-2908
Pico Rivera	. 9459 East Slauson Avenue, Pico Rivera, CA 90660 (562) 949-7827, Fax	x (562) 949-9860
Sacramento	. 2424 Arden Way, Suite 165, Sacramento, CA 95825 (916) 263-2800, Fax	x (916) 263-2798
San Bernardino	. 464 W. 4th Street, Suite 332, San Bernardino, CA 92401 (909) 383-4321, Fax	x (909) 383-6789
San Diego	. 7575 Metropolitan Drive, Suite 207, San Diego, CA 92108 (619) 767-2280, Fax	x (619) 767-2299
San Francisco	. 455 Golden Gate Avenue, Suite 1524, San Francisco, CA 94102 (415) 703-5210, Fax	x (415) 703-5231
San Jose	. 2010 No. First Street, Suite 401, San Jose, CA 95131 (408) 452-7288, Fax	x (408) 452-7287
Santa Rosa	. 1221 Farmers Lane, Suite 300, Santa Rosa, CA 95405 (707) 576-2388, Fax	x (707) 576-2598
Torrance	. 680 Knox Street, Suite 100, Torrance, CA 90502 (310) 516-3734, Fax	x (310) 516-4253
Van Nuys	. 6150 Van Nuys Boulevard, Suite 405, Van Nuys, CA 91401 (818) 901-5403, Fax	x (818) 901-5578
Ventura	. 1655 Mesa Verde Avenue, Suite 150, Ventura, CA 93003 (805) 654-4581, Fax	x (805) 654-4852
West Covina	. 1906 West Garvey Ave. South, Ste 200, West Covina, CA 91790 (626) 472-0046, Fax	x (626) 472-7708
Cal/OSHA Consultation Se	rvice Area Offices—Consultation Toll-Free Number (800) 963-9424	
Northern California	. 2424 Arden Way, Suite 485, Sacramento, CA 95825	. (916) 263-5765
San Francisco Bay Area	. 1515 Clay Street, Suite 1103, Oakland, CA 94612	. (510) 622-2891
Central Valley	. 1901 North Gateway Blvd., Suite 102, Fresno, CA 93727	. (559) 454-1295
San Fernando Valley	. 6150 Van Nuys Blvd., Suite 307, Van Nuys, CA 91401	. (818) 901-5754
Los Angeles	. 10350 Heritage Park Dr., Suite 201, Sante Fe Springs, CA 90670	. (562) 944-9366
San Bernardino, Orange	. 464 W. 4th Street, Suite 339, San Bernardino, CA 92401	. (909) 383-4567
San Diego	. 7575 Metropolitan Drive, Suite 204, San Diego, CA 92108	. (619) 767-2060
Process Safety Manageme	nt Unit	
Anaheim	. 2100 East Katella Avenue, Suite 225, Anaheim, CA 92806 (714) 939-8952, Fax	x (714) 939-8972
Concord	. 1465 Enea Circle, Bldg. E, Suite 945, Concord, CA 94520 (925) 602-2665, Fax	x (925) 602-2668
Mining and Tunneling Unit		
Sacramento	. 2211 Park Towne Circle, Suite 2, Sacramento, CA 95825 (916) 574-2540, Fax	x (916) 574-2542
Van Nuys	. 6150 Van Nuys Boulevard, Suite 310, Van Nuys, CA 91401 (818) 901-5420, Fax	x (818) 901-5579
San Bernardino	. 242 E. Airport Drive, Suite 105, San Bernardino, CA 92408 (909) 383-6782, Fax	x (909) 388-7132
Other Resources		
Occupational Safety & Health	Standards Bd 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833	. (916) 274-5721
Occupational Safety & Health	Appeals Bd 2520 Venture Oaks Way, Suite 300, Sacramento, CA 95833	. (916) 274-5751
Occupational Safety & Health	Appeals Bd 100 N. Barranca St. Suite 410, West Covina, CA 91791	. (626) 332-1145
DOSH Asbestos Contractors I	Registration Unit 455 Golden Gate Avenue, 10th Floor, San Francisco, CA 94102	. (415) 703-5100
DOSH Occupational Carcinog	gen Control Unit 455 Golden Gate Avenue, 10th Floor, San Francisco, CA 94102	. (415) 703-5100
Department of Toxic Substance	ces Control 1001 I Street, P.O. Box 806, Sacramento, CA 95812	. (916) 324-1826
State Allocation Bd./Public Sc	hool Construction 1130 K Street, Suite 400, Sacramento, CA 95814	. (916) 445-3160
Cal/OSHA Consultation Educ	ration Unit2211 Park Towne Circle, Suite 4, Sacramento, CA 95825	. (916) 574-2528